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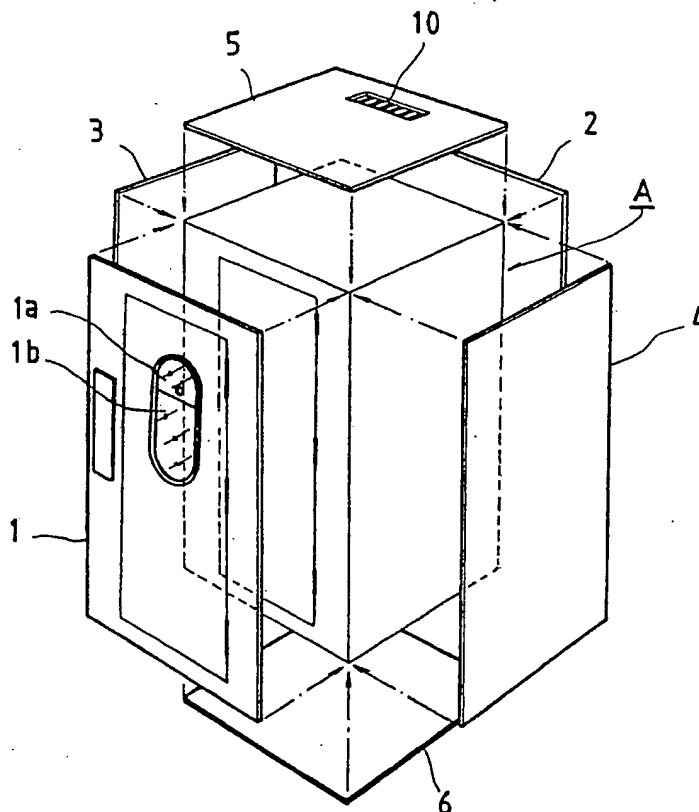
A4N

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(54) Prefabricated sauna box

Fig. 1

(57) A prefabricated sauna box is assembled on site from prefabricated panels 1 to 6. In a second embodiment the sauna is assembled from two box halves that are held together by clamps. The sauna box is thus readily transportable. An infrared heater is provided and the box is designed for single person occupancy. An openable window 1a, 1b is provided in a door and there is a ventilation opening 10.



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Fig. 1

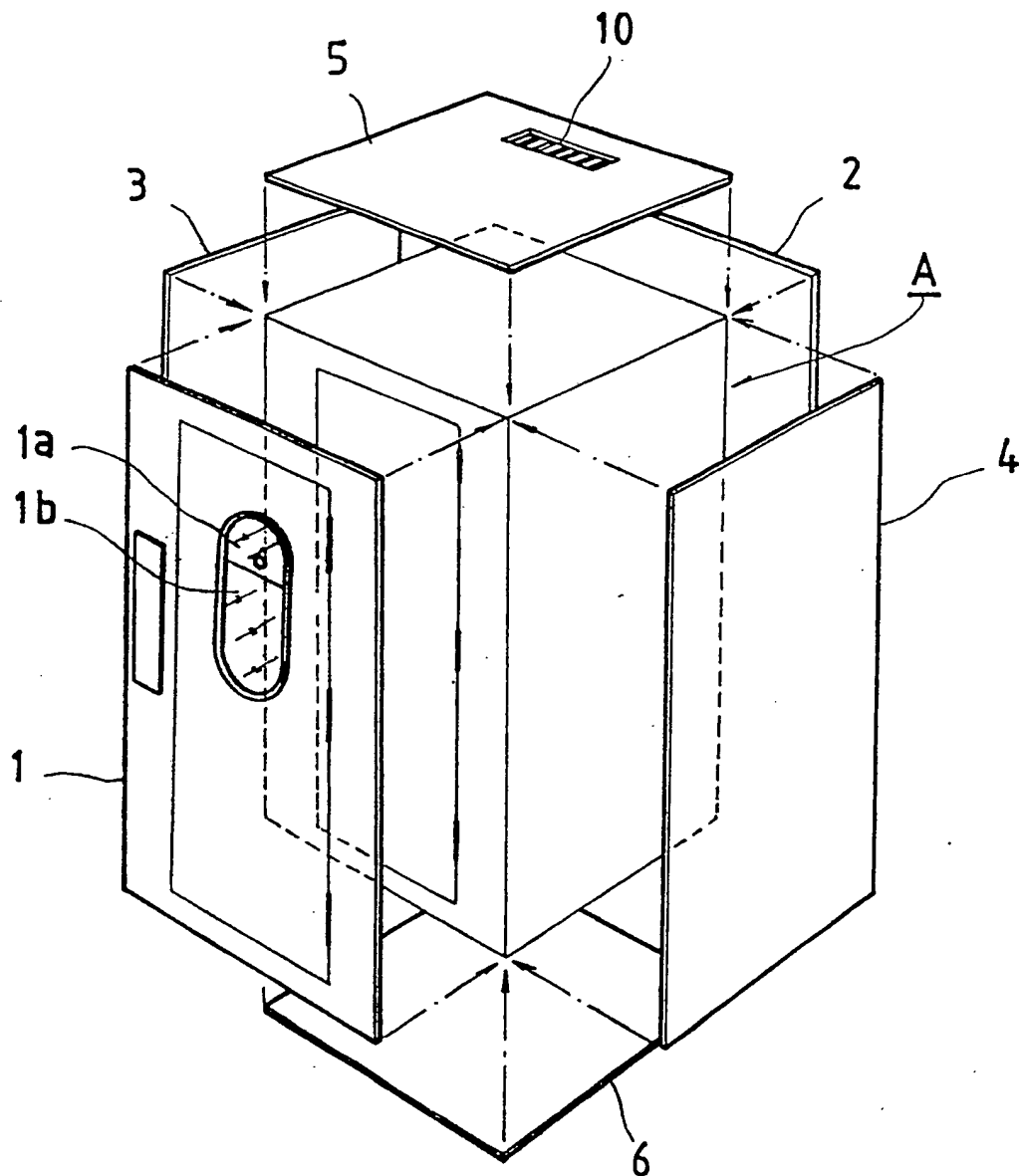


Fig. 2

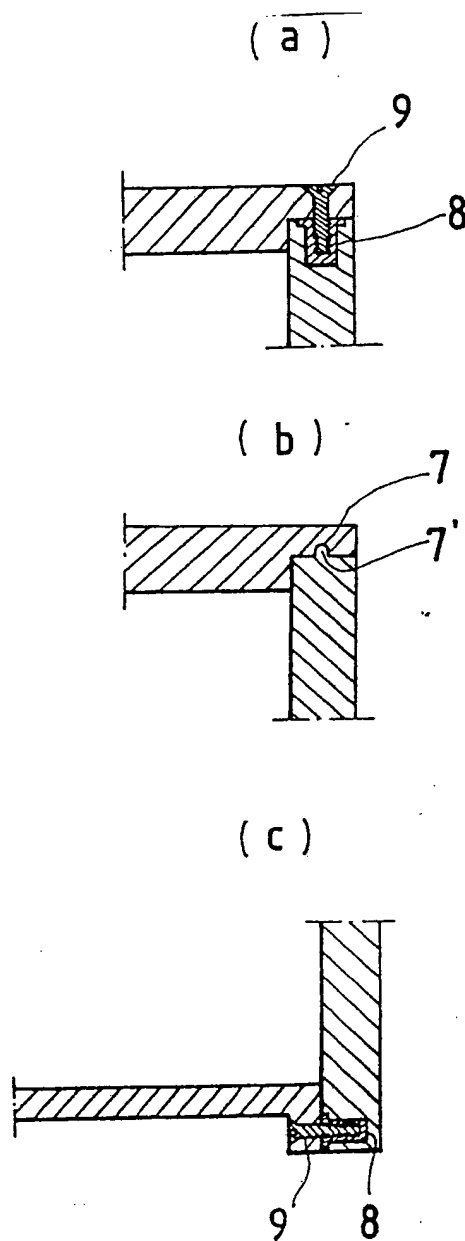


Fig. 3

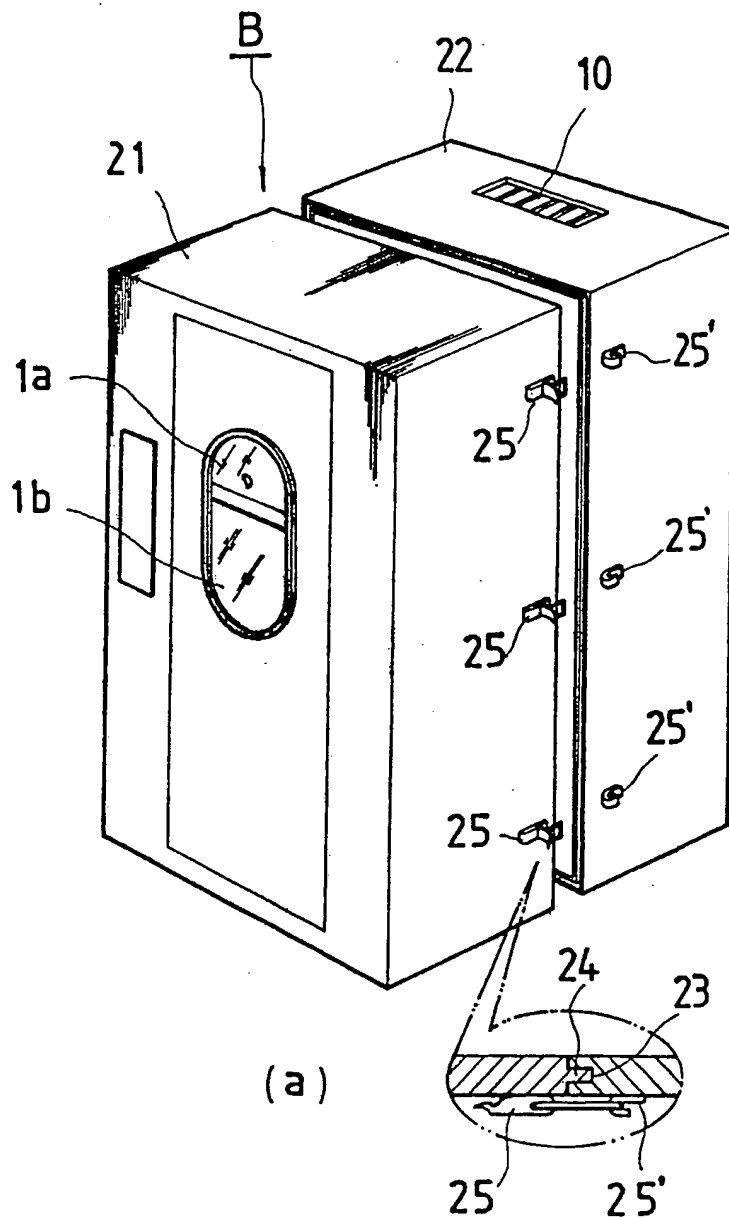


Fig. 4

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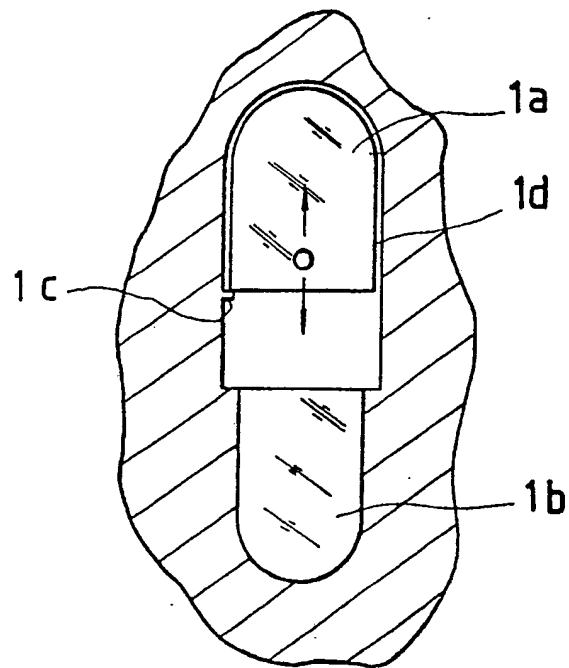


Fig. 5

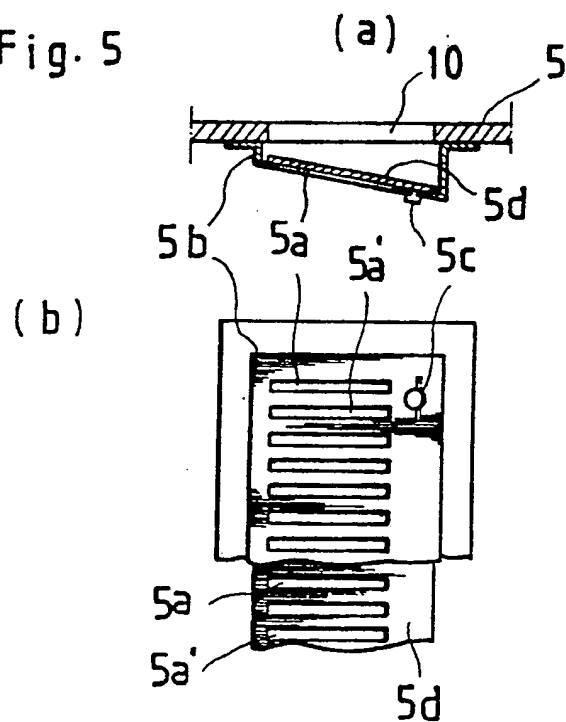
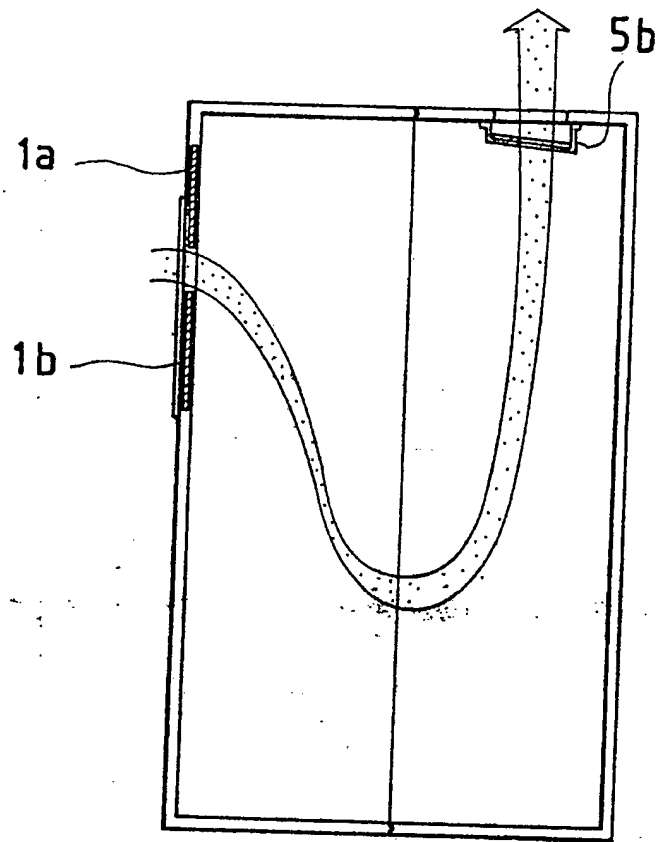


Fig. 6

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SPECIFICATION

Prefabricated sauna box

5 This invention relates to a prefabricated sauna box which may be advantageously employed as a private single occupancy sauna box at home or in a health or golf club.

In the prior art, such a sauna box has been
10 manufactured in a factory as a fixed-box of a complex structure, with a high manufacturing cost. The resulting large box is difficult and expensive to transport because of its large volume. Furthermore, if the box is provided
15 with protective packing material for transport, it becomes even larger and more expensive to transport, but if such packaging is omitted the box is liable to be damaged. Another problem with prior art prefabricated sauna boxes is
20 that they are completely enclosed, with results in inadequate ventilation that can damage the respiratory organs.

An object of the present invention is to provide an improved sauna box which can be
25 prefabricated with the front, rear, left, right, upper and bottom panels separately, having the fittings such as a far-infrared heater and the like affixed into the above panels being completed with the final painting.

30 An other object of the present invention is to provide a sauna box which can be prefabricated with two separately manufactured longitudinal half bodies.

A still another object of the present invention is to provide a sauna box which provides
35 a passage of ventilating air. A still another object of the present invention is to provide a sauna box which can be on site assembled by either thread-coupling or clamp-coupling.

40 According to the invention there is provided a prefabricated sauna box, comprising a plurality of panels, a plurality of connecting means for connecting the panels to one another to form the box, an openable window in one of
45 the panels that forms a wall of the box, and a ventilation opening in another of said panels whereby to provide a controllable ventilation air flow between the window and the ventilation opening.

50 Features and advantages of the invention will be evident from the following detailed description of preferred embodiments given with reference to the accompanying drawings wherein:

55 Figure 1 illustrates separated and fabricated states for a first embodiment of the invention. Figure 2(a)-(c) show details of connecting portions in Figure 1;

60 Figure 3 is a perspective view of the second embodiment of the invention with its box portions separated from one another.

Figure 4 shows a structure of a transparent window in the box according to the invention:

65 Figure 5(a) and (b) show structures of a vent accommodator, and

Figure 6 illustrates air flow in a sauna box according to the invention. Referring firstly to Figure 1, panels for a sauna box (A) are separately manufactured as a front wall panel 1, a rear wall panel 2, a left wall panel 3, a right wall panel 4, an upper or roof panel 5 and a bottom or base panel 6, and respective connecting portions thereof are formed with concave (7) and convex (7') connecting regions
75 respectively. Additionally, a bolt receiving fixing in the form of a nut tube 8 is inserted into the connecting portions and is threadly coupled with a bolt 9 on the opposite side.

A transparent slidable window in the front panel 1 is divided into two parts that is, an upper window 1a and a lower window 1b. As can be seen from Figure 4, the upper window 1a is received in a sliding groove 1d on which a stopper 1c is mounted. Referring again to
85 Figure 1, in the upper panel 5 there is mounted a vent accommodator 10 which as shown in Figure 5 consists of a fixed venting plate 5b and an adjustable venting plate 5d. Corresponding elongate venting openings 5a, 5a' are formed in the two plates 5b 5d and a catch 5c is mounted on the adjustable venting plate 5d so that the plate 5d can be slidable
90 for controlling the ventilation.

Referring now to the second embodiment (B) of sauna box shown in Figure 3, it is formed in a factory as separate half bodies comprising a front box portion 21 and a rear box portion 22. The front box portion 21 has a tongue like protrusion 24 in its connecting edge portion and the rear box portion 22 has a corresponding groove 23 in its connecting edge portion. Further, on the connecting portions releasable coupling-clamps 25, 25' are mounted to fix the two portions box 21, 22
100 edgewise to one another.

A transparent window 1 and a vent accommodator 10 are provided as in the first embodiment.

110 Both of the described embodiments utilise electric infrared heaters which operate in the far-infrared wavelength range, to provide heat for the sauna effect. Each embodiment is of a size suitable for single person occupancy i.e. for use as a private sauna.

115 In the first embodiment (A), all the sauna accessories fittings and electrical equipment for the heater etc., are attached to the panels and, therefore, a sauna box can be simply assembled at a particular site by means of wiring with jacks and plugs, and joining the panels by inserting the convex region 7' into the concave region 7 and thread-coupling each nut-tube 8 with a bolt 9.

120 In the second embodiment (B), when assembled, the two half bodies are coupled by clamps 25, 25' with the tongues 24 being inserted into the grooves 23. Upon transport, however, a sauna box (B) would be divided into a front portion box 21 and a rear box portion 22 by releasing the clamps 25, 25' so
130

that each box can be easily moved and simply handled.

A sauna box according to the invention can thus be carried and transported with a mini-
 5 mized volumetric unit package in either half box volume or about 6 panels volume so that the expenses for shipping and custody can be greatly reduced together with the danger of breakage during the transportation. In addition,
 10 for the sake of interior ventilation, the upper window 1a of the slidable door can slide upwards along the sliding groove 1d and be nested on the upper 1c, thereby making it possible that the air flows into the box inside.
 15 Also the amount of exhausted air can be adjusted by controlling the magnitude of the venting openings 5a, 5a' in the fixed venting plate 5d by virtue of the catch 5c in the vent accommodator 10. Accordingly, the effect of
 20 the sauna bath will be improved by applying the air-ventilation. The passage of air through the box is shown in Figure 4.

CLAIMS

- 25 1. A prefabricated sauna box, comprising a plurality of panels, a plurality of connecting means for connecting the panels to one another to form the box, an openable window in one of the panels that forms a wall of the
 30 box, and a ventilation opening in another of said panels whereby to provide a controllable ventilation air flow between the window and the ventilation opening.
2. A sauna box according to Claim 1
 35 wherein said plurality of panels comprises six rectangular panels to form walls, roof and the base of a rectangular box.
3. A sauna box according to Claim 2
 40 wherein edges of the panels are formed with cooperating jointing regions and the connecting means include a bolt receiving fixing received in one of the panels, and a bolt for extending through another of the panels into the fixing.
- 45 4. A sauna box according to Claim 3 wherein said cooperating jointing regions have cooperating convex and concave portions.
5. A sauna box according to Claim 1
 50 wherein the panels from front and rear box portions, each of said portions including vertically extending wall portions and a respective part of the base and roof of the box, and said connecting means include releasable clamps for clamping panels of the two box portions
 55 together edgewise to assemble the box.
6. A sauna box according to Claim 5 wherein the edgewise held panels have cooperating tongues and grooves formed in their edges.
- 60 7. A sauna box according to any preceding claim including an infrared heater operable in the far-infrared wavelength region.
8. A sauna box according to any preceding claim including electrical apparatus mounted on
 65 different ones of the panels, and electrical

connector means for providing electrical connections between the apparatus upon assembly of the panels to form the box.

9. A sauna box according to any preceding
 70 claim wherein the window is slidably mounted in grooves for vertical movement.

10. A sauna box according to any preceding claim wherein the window is mounted in a door.

75 11. A sauna box according to any preceding claim and of a size for single person occupancy.

12. A prefabricated sauna box substantially as hereinbefore described with reference to
 80 Figures 1 and 2, or 3 together with 5 and 6 of the accompanying drawings.

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